

User's Guide



MOTOROLA
TALKABOUT®
TWO-WAY RADIO



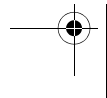
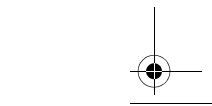
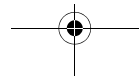
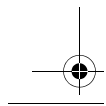
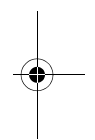
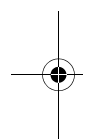
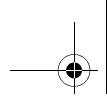
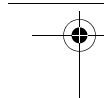
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Models T7100 and T7200

010730-C



6881038B85.book Page 1 Thursday, August 30, 2001 3:07 PM



Introduction

Thank you for purchasing a Motorola T7000-Series radio. Your radio is a product of Motorola's 70 years of experience as a world leader in the designing and manufacturing of communications equipment. This revised industrial design reflects the heritage and ruggedness of the Talkabout Series line. With proper care and use, your Motorola radio should give you years of reliable communication.

Motorola two-way radios are the perfect communications solution for all of today's fast-paced industries.

Note: Please read this manual carefully to ensure you know how to properly operate the radio before use.

Product Specifications

| | | |
|-----------------|----|--|
| Frequency | | UHF (MHz) 462.5625-467.7250 |
| Channels | 22 | T7100 |
| | 30 | T7200 |
| Codes | | 38 X CTCSS |
| Channel Spacing | | 12.5/25kHz Consumer selectable |
| Power Source | | 1 NiMH Battery |
| | | 4 AA Alkaline or off the shelf nickel rechargeable batteries |



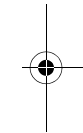
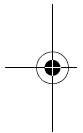
Literature (Not shown)

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Motorola
Consumer Products Division
1705 Belle Meade Court
Lawrenceville, GA 30043



For a copy of a large-print version of this guide, or for product-related questions, please call the following numbers:

1-800-353-2729 (U.S.A.)

1-800-461-4575 (Canada)

1-888-390-6456 TTY (Text Telephone)

1-888-390-6456 TTY (Text Telephone)

On the web, please refer to the following url:

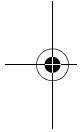
www.motorola.com/talkabout



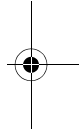
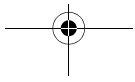
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PRELIMINARY



Safety and General Information

Important Information on Safe and Efficient Operation

Read This Information Before Using Your Radio

The information provided in this document supersedes the general safety information contained in user guides published prior to July 2000. For information regarding radio use in a hazardous atmosphere please refer to the Factory Mutual (FM) Approval Manual Supplement or Instruction Card, which is included with radio models that offer this capability.

RF Operational Characteristics

Your radio contains a transmitter and a receiver. When it is ON, it receives and transmits radio frequency (RF) energy. The radio operates in the frequency range of 461 MHz to 497 MHz. The output power level typically may vary over a range from 0.5 watts to 1.0 watt.

Exposure to Radio Frequency Energy

Your Motorola radio is designed to comply with the following national and international standards and guidelines regarding exposure of human beings to radio frequency electromagnetic energy:

- United States Federal Communications Commission, Code of Federal Regulations; 47 CFR part 2 sub-part J
- American National Standards Institute (ANSI) / Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992
- Institute of Electrical and Electronic Engineers (IEEE) C95.1-1999 Edition
- National Council on Radiation Protection and Measurements (NCRP) of the United States, Report 86, 1986

- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998
- Ministry of Health (Canada) Safety Code 6. Limits of Human Exposure to Radio Frequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz, 1999
- Australian Communications Authority Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 1999 (applicable to wireless phones only)

To assure optimal radio performance and make sure human exposure to radio frequency electromagnetic energy is within the guidelines set forth in the above standards, always adhere to the following procedures:

Portable Radio Operation and EME Exposure

Antenna Care

Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications, or attachments could damage the radio and may violate FCC regulations.

DO NOT hold the antenna when the radio is "IN USE." Holding the antenna affects the effective range.

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Two-Way Radio Operation

When using your radio as a traditional two-way radio, **hold the radio in a vertical position** with the microphone two to three inches (5.0 to 7.5 cm) away from the lips.

Body-Worn Operation

To maintain compliance with FCC/Health Canada RF exposure guidelines, if you wear a radio on your body when transmitting, always place the radio in a **Motorola supplied or approved clip, holder, holster, case, or body harness for this product**. Use of non-Motorola-approved accessories may exceed FCC RF exposure guidelines. **If you do not use a body-worn accessory, ensure the radio and its antenna is at least two inches (5 cm) from your body when transmitting.**

Data Operation

When using any data feature of a device, with or without an accessory cable, position the device and its antenna at least one inch (2.5 cm) from the body.

Approved Accessories

For a list of approved Motorola accessories refer to the Two-Way Radio section of www.motorola.com/store.

Electromagnetic Interference/Compatibility

Note: Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed or otherwise configured for electromagnetic compatibility.

Facilities

To avoid electromagnetic interference and/or compatibility conflicts, turn off your radio in any facility where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.

Aircraft

When instructed to do so, turn off your radio when on board an aircraft. Any use of a radio must be in accordance with applicable regulations per airline crew instructions.

Medical Devices

Pacemakers

The Advanced Medical Technology Association recommends that a minimum separation of 6 inches (15 centimeters) be maintained between a handheld wireless radio and a pacemaker. These recommendations are consistent with the independent research by, and recommendations of the U.S. Food and Drug Administration.

Persons with pacemakers should:

- ALWAYS keep the radio more than six inches (15 centimeters) from their pacemaker when the radio is turned ON.
- not carry the radio in the breast pocket.
- use the ear opposite the pacemaker to minimize the potential for interference.
- turn the radio OFF immediately if you have any reason to suspect that interference is taking place.

Hearing Aids

Some wireless radios may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.

Safety and General Use While Driving

Check the laws and regulations on the use of radios in the area where you drive. Always obey them. When using your radio while driving, please:

- Give full attention to driving and to the road.
- Use hands-free operation, if available.
- Pull off the road and park before making or answering a call if driving conditions so require.

Operational Warnings

For Vehicles with an Air Bag

Do not place a portable radio in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a portable radio is placed in the air bag deployment area and the air bag inflates, the radio may be propelled with great force and cause serious injury to occupants of the vehicle.

Potentially Explosive Atmospheres

Turn off your radio prior to entering any area with a potentially explosive atmosphere, unless it is a radio type especially qualified for use in such areas as "Intrinsically Safe."

Do not remove, install, or charge batteries in such areas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

Note: The areas with potentially explosive atmospheres referred to above include fueling areas such as below decks on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine. Areas with potentially explosive atmospheres are often but not always posted.

Blasting Caps and Areas

To avoid possible interference with blasting operations, turn off your radio when you are near electrical blasting caps, in a blasting area, or in areas posted: "Turn off two-way radio." Obey all signs and instructions.

Operational Cautions

Antennas

Do not use any portable radio that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn can result.

Batteries

All batteries can cause property damage and/or bodily injury such as burns if a conductive material such as jewelry, keys, or beaded chains touch exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

Charging Safety Instructions

Before using the battery charger, read all instructions and cautionary markings on:

1. the battery
2. the battery charger, and
3. the radio using the battery.

Caution: To reduce the risk of injury, charge only the rechargeable batteries listed. Other types of batteries may burst, causing personal injury and damage.

Save these Instructions

1. Do not expose the charger to rain or snow.
2. Do not operate the charger if it has received a sharp blow, or has been dropped or damaged in any way.
3. Do not disassemble the charger if it has received a sharp blow, or has been dropped or damaged in any way.
4. Never alter the AC cord or plug provided with the unit. If plug will not fit the outlet, have proper outlet installed by a qualified electrician. An improper condition can result in a risk of electric shock.
5. To reduce risk of damage to cord or plug, pull the plug rather than the cord when disconnecting charger from AC receptacle.

6. To reduce the risk of electric shock, unplug the charger from the outlet before attempting any maintenance or cleaning.
7. Use of an attachment not recommended or sold by Motorola may result in a risk of fire, electric shock, or personal injury.
8. Make sure that the cord is located so that it will not be stepped on, tripped over, or subjected to damage or stress.
9. An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and/or electric shock. If an extension cord must be used, make sure:
 - That the pins on the plug of the extension cord are the same number, size and shape as those on the plug of the charger.
 - That the extension cord is properly wired and in good electrical condition, and
 - That the cord size is 18 AWG for lengths up to 100 feet, and 16 AWG for lengths up to 150 feet.
10. The supply cord of this charger cannot be replaced. If the cord is damaged, call Motorola Product Services at:

1-800-353-2729 (U.S.A.)

1-800-461-4575 (Canada)

1-888-390-6456 TTY (Text Telephone) 1-888-390-6456 TTY (Text Telephone)

FCC Licensing Information

Your Motorola radio operates on General Mobile Radio Service (GMRS) frequencies and is subject to the Rules and Regulations of the Federal Communications Commission (FCC). The FCC requires that all operators using General Mobile Radio Service (GMRS) frequencies obtain a radio license before operating their equipment. To have the FCC forms please request Form **605** which includes all forms and instructions. If you wish to have the document faxed, mailed or have questions, please use the following contact information.

| Faxed contact the Fax-On- Demand system at: | Mailed call the FCC forms hotline at: | Questions regarding FCC license contact the FCC at: |
|--|---|---|
| 1-202-418-0177 | 1-800-418-FORM 1-800-418-3676 | 1-888-CALL-FCC 1-888-225-5322 |
| Or: http://www.fcc.gov/Forms | | |

Before filling out your application, you must decide which frequency(ies) you can operate on. See the Frequency and Code Charts found on page 36.
For questions on determining your radio frequency, please call Motorola Product Services at:

1-800-448-6686

FCC

FCC Licensing Information

FCC





FCC Licensing Information

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Changes or modifications not expressly approved by Motorola may void the user's authority granted by the FCC to operate this radio and should not be made. To comply with FCC requirements, transmitter adjustments should be made only by or under the supervision of a person certified as technically qualified to perform transmitter maintenance and repairs in the private land mobile and fixed services as certified by an organization representative of the user of those services. Replacement of any transmitter component (crystal, semiconductor, etc.) not authorized by the FCC equipment authorization for this radio could violate FCC rules. **Note:** Use of this radio outside the country where it was intended to be distributed is subject to government regulations and may be prohibited.

Getting Started

Turning On/Off Your Radio

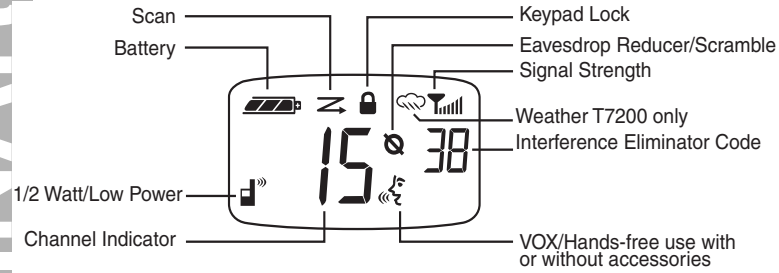
| Turn knob | Display | Normal Menu Mode |
|---|--|---|
|  |  | Turn knob on the top of the radio clockwise to use. Turn the Knob counterclockwise to turn the radio off. The radio chirps and the display will show all feature icons that your radio has available for a period of approximately three seconds. |
| |  | Depending upon your radio model; T7100 will have the channel 1-22 and the Interference Eliminator Code (0-38)* left on display. *Previous usage dictates Interference Eliminator Code.) |
| |  | For T7200 the channel 1-22 and/or subsequent repeater channel 15 rP - 22 rP will be left on display as in the figure to the left. |

A Diagram of your New T7000 Series Radio and its Functions can be found on page 8.

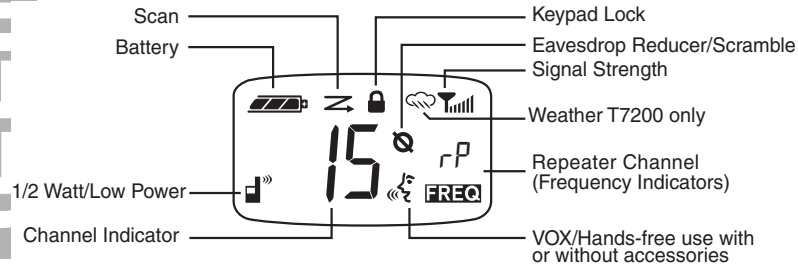
Note: The red indicator light under the antenna flashes every three seconds.

PRELIMINARY

Diagram of Your Radio's Display



NORMAL USE ALL MODELS



T7200 ONLY WITH REPEATER ENABLED

Installing Batteries

Some radio packages include a rechargeable Nickel-Metal Hydride (NiMh) battery (NTN8971), or you may use 4 AA alkaline batteries. If you would like to obtain the battery, the charger or the Rechargeable Upgrade Kit (Accessory 53897), please call the following numbers to locate the dealer nearest you:

(U.S.A.) 1-800-353-2729

(Canada) 1-800-461-4575

You may also obtain accessory items via Motorola's Talkabout website:

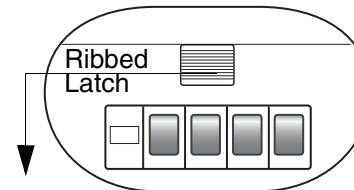
www.motorola.com/talkabout

The NiMH Battery Installation

Your radio uses one rechargeable Nickel-Metal Hydride Battery (NTN8971). These cells provide 13 hours* of radio use.

Note: *Based upon 5/5/90 duty cycle.

- To begin, push the Ribbed Latch on the bottom of the radio away from the back cover, or toward the contacts.



Getting Started

5

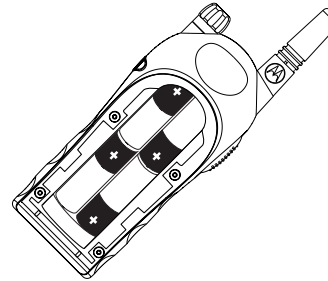
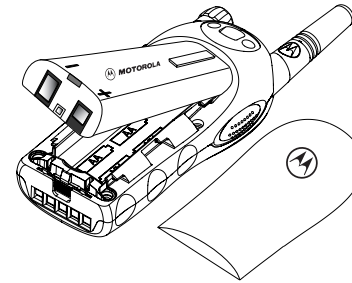
- Slide and lift the back cover off.
- Place the battery (NTN8971) so that the charge contacts are facing out toward the battery door. The battery fits tightly into place.
- Slide and snap the cover back into place

AA Alkaline Batteries Installation

Your radio also uses 4 AA alkaline batteries; these cells provide 20 hours* of radio use.





- Push the ribbed latch on the bottom of the radio away from the battery door.
- Slide and lift the battery door off.
- Place AA batteries so that the + marking match the markings in the compartment.
- Slide and snap the battery cover into place.



Note: Based upon 5/5/90 duty cycle.



Battery Meter

The battery meter located in the upper left hand corner of the display indicates how much battery power you have.

| Full | Two-thirds Full | One-third Full | Battery Meter flashes when almost empty. |
|---|---|---|---|
|  |  |  |  |

The radio will power off when the voltage drops below a pre-determined level in order to protect the rechargeable battery. When the battery meter Flashes;  , the radio chirps after releasing  and every 5 minutes.

PRELIMINARY

Getting Started

Charging

The NiMH battery with Plug-in Charger(53898)

- Make sure NiMH battery is left inside the radio.
- Make sure the radio is Off.
- Plug the charger into an electric outlet.
- Lift Accessory cover and plug the Charger firmly into the small jack socket. Please see figure.

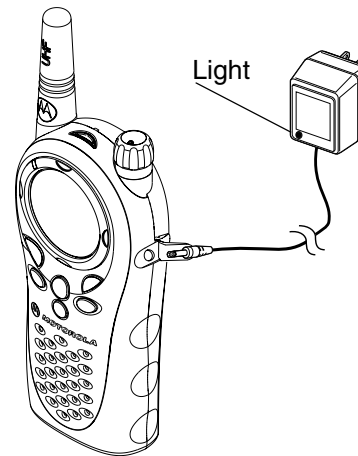
Note: The light on the charger will glow red continuously while charging.

Charge the battery (NTN8971) overnight (16 hours) before using it for the first time. It will only need up to ten (10) hours of charging thereafter.

For optimum battery life, the battery must not be left charging for prolonged periods after reaching full charge.

If radio is On while charging, additional time is required to charge the battery.

Caution: Do not transmit while radio is charging. Transmitting while radio is charging can cause the radio transmitter or the charger to operate improperly.



With Drop-in Charging Tray (53872 Not Included)

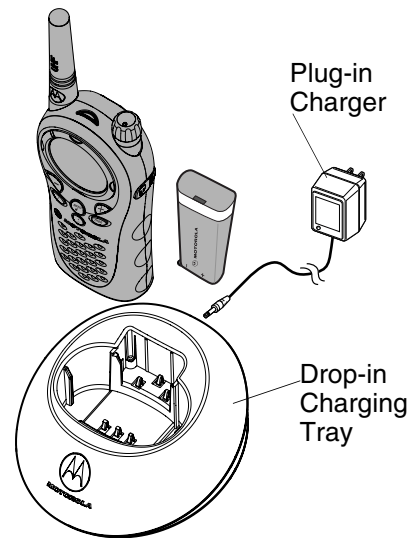
The Drop-in Charging Tray can be placed on any flat surface and provides drop-in charging convenience.

- Connect Plug-in Charger and Drop-in Charging Tray by placing plug into the rear of Drop-in Charging Tray.
- To charge the battery (NTN8971), drop the radio into the Drop-in Charging Tray with front of the radio facing toward you.

Note: The battery can be charged while inside the radio or separately. The battery's silver contacts must face down and the Motorola Logo must face the front of Charger.

The light on the Plug-in Charger (53898) will glow continuously when radio / battery is inserted.

Note: Allow 10 hours for the battery to reach full charge.



Before Using Your Radio

To talk with someone on your two-way radios, the following features need to be set exactly alike:

1. *Channel* (The current Channel.)
2. *Frequency* (The radio frequency wave your radio uses to transmit.)
3. *Interference Eliminator Code* (These codes help minimize interference by providing you with a choice of code combinations.) Please refer to the page 36.
4. *Eavesdrop Reducer** (The T7200 is the only model that has this feature.) These scramble codes make your transmissions sound garbled to anyone listening who is not set to that Eavesdrop Reducer. For more information, please see page 26.

Note: Radio must be turned On.

Access  by pushing down the  button until the chosen icon appears. Now, you may use your radio's  and  or  to select/set features.







| Press | Display | Then Press |
|--|--|--|
|  | the icon representing the feature you want |  or  to select the feature, then press or wait ten seconds to save the setting or press and hold  . A Table to help you understand Menu Functions begins on page 22. |


Diagram of your New T7000-Series Radio and its Functions

PRELIMINARY

Indicator Light:

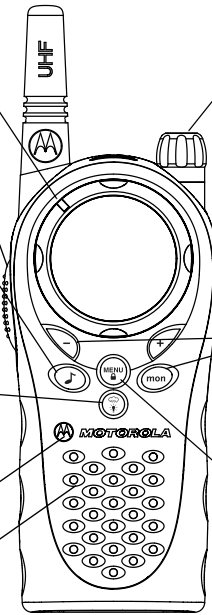
Use  to:
Talk
Exit a menu


Use  to:
Transmit call tone

Use  to:
Turn on backlight
(short press)
Press and hold to
switch between
Weather Mode and
Two-way Mode
(T7200 only)



Microphone:


Speaker:




Use  (Power) to:
Turn power On/Off
Adjust volume to talk
on your radio

Accessory cover/flap

Use  and  to:
Scroll through menu settings
Change Channels

Use  to:
Turn Scan On/Off
(short press)
Monitor the channel & check
signal strength (long press)



Use  to:
Scroll through menus
Lock the keypad
(when held down
& not in a menu)

Before Using Your Radio

Operating Your T7000 Series Radio

Note: The microphone is located on the front of your radio, please refer to the diagram on page 11.



- Press and hold .
- Talk two-to-three inches away from the microphone.
- When you're finished talking, release .

While transmitting, the red indicator light located just underneath the antenna on the left front of the radio, glows.

Talking Range



Optimal Range
Flat, open areas
• **Outdoor**


















Medium Range
Buildings or trees
• **Outdoor**
Also near residential buildings




Minimal Range
Dense foliage or mountains
• **Outdoor**
Also inside some buildings
• **Indoor**

Changing Your Radio's Settings through Button Combinations

The following table lists the functions you can set by pressing and holding specific key combinations while turning your radio to the On position: .


| Key(s) Pressed. | Function |
|---|---|
|   | Enable VOX/Hands-free usage without accessories. |
|   | Turns "Roger" Beeps On or Off. |
|   | Turns Audible Button Beeps On or Off. |
|    | Enable/Disable Repeater Channels by holding down  and  for three seconds. |
|    | Selecting bandwidth between 12.5 kHz and 25 kHz. |




Note: For more specific information regarding Menu/ Button Combinations, please refer to Table of Menu Functions found on page 22.






Accessing the Backlight

Your radio has a backlight that turns on automatically any time you press a button. The backlight turns off automatically five seconds after you last pressed a button.

Checking Monitor/Signal Strength Indicator

The  button allows you to listen to all activity on a channel to tell whether the channel is currently in use. This button can also help you determine when a radio is moving out of range.



- To check for channel activity, press and hold the  button for three seconds, then release. You'll hear static if the channel is clear and  will display. To avoid interrupted conversation, wait until the channel is clear or switch to another channel. To stop monitoring, briefly press  and release.


The  helps you determine when a radio is moving out of range by displaying a receive signal-strength value next to the  while you press and hold . This value from  (weakest) through  (strongest) indicates the relative strength of the incoming signal.





Note: Obstacles that block the signal path affect the strength of the incoming signal.

Talk Confirmation Tone

When you turn on this feature, your two-way radio transmits a unique tone when you finish transmitting. It's like saying "Roger" or "Over" and lets others know you're finished talking. If you don't hear the talk confirmation tone, you can enable it by pressing and holding  as you turn on your radio. Now, whenever you release the  button, you let your friends know you're finished talking by transmitting a "Roger" Beep tone.

Note: To disable the talk confirmation tone feature, turn your radio off and then back on while pressing and holding .

Button Beeps

Every time you press a button on your radio, it beeps unless you turn Button Beeps off. To turn Button Beeps off, turn your radio on while you press and hold . To turn Button Beeps back on, turn the radio off and then back on again while you press and hold .

PRELIMINARY



16 Changing your Radio's Menu Settings

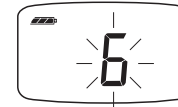
Changing your Radio's Menu Settings

Setting the Channel

- Turn radio On.
- Press or until you find a clear channel.

Set the channel by pressing once.

Note: The red indicator light below the antenna on the left front of the radio flashes every second when the channel is in use.



To set Repeater Channels (T7200 only), please refer Setting Repeater Channels found on page 28.

Setting the Interference Eliminator Code





The Interference Eliminator Code helps minimize interference by providing you with a choice of code combinations.

- Turn radio On.
- To set, press until the code number display begins to flash.
- Then press or to choose the code.
- Press to exit this menu.





Note: To hear everyone on your channel, select Interference Eliminator Code . You can specify a different Interference Eliminator Code for each channel.









- To set a channel and code combination, press or to select the channel.

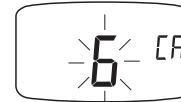
- Press  and then press  or  to select a code.
- To exit the menu, Press  and to save the channel and code combination.
- To set another channel and code combination, repeat these steps.

Note: To set your Repeater Interference Eliminator Code (T7200 only), please refer Setting Repeater Interference Eliminator Codes found on page 28.

Setting the Call Tone and Call Display

Your radio can transmit different individual call tones to other radios in your group so you can alert the group that you want to talk to them. There are ten distinct individual call tones to choose from and you can also turn Call Tones Off by selecting code . Once selected, just press  to transmit the Call Tone to others.

- Turn radio On.
- To set your call tone, press  as needed to display:  .
- You can press  or  to scroll through the available call tones. The radio plays a sample of each individual Call tone as you scroll through them.
- The default is set on , or you may choose  - .





Setting Sensitivity Level

Adjusting your radio's Sensitivity Level helps to minimize the possibility of unintended noises triggering a transmission, or enhances the ability to pick up quiet voices.

The sensitivity level is adjusted in three different situations:

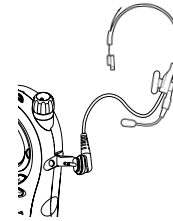
- When a Hands-free or VOX accessory is plugged in and VOX is enabled. Please refer to Understanding Hands-Free Use/VOX with Accessory found on page 19. To turn VOX off, please remove accessory.
- When internal VOX is enabled (without accessory use). Please refer to Understanding Hands-Free Use/VOX without Accessory found on page 20. To turn VOX Off, turn your radio Off and then back On. This VOX symbol will have disappeared.
- For normal use (VOX off, no accessory use). Please see Operating Your T7000 Series Radio found on page 12.
- Turn radio On.
- To set sensitivity level, press as needed, until and and a value of 1 through 3 is visible.
- Select 1-3 by using or :
High Sensitivity 3, for quiet environments
Medium Sensitivity 2, for most environments and
Low Sensitivity 1 for noisy environments.













Understanding Hands-Free Use/VOX with Accessory




VOX allows “hands-free” transmission when used with compatible VOX accessories.

- Turn radio Off.
- Open Accessory Cover.
- Insert plug of VOX/audio accessory firmly into Accessory Jack.
- Turn radio On and lower volume before placing accessory on head or in ear.
- To transmit, speak into Accessory Microphone and to receive, stop talking.





The default VOX sensitivity level must be changed for initial use. The  will flash if sensitivity is set to .

- Press  as needed to display  and .
- Select Sensitivity Level of , , or  by using  or .

High Sensitivity , for quiet environments
Medium Sensitivity , for most environments and
Low Sensitivity  for noisy environments.



To order accessories, please refer to: www.motorola.com/talkabout.






- VOX operation can be disabled by pressing .
- A short press  will enable VOX.

Caution: The use of wireless devices and their accessories may be prohibited or restricted in certain areas. Always obey the laws and regulations on the use of these products.



Understanding Hands-Free Use/VOX without Accessory

The T7000-Series radios are capable of hands-free use without accessories.





- Enable VOX by pressing  while turning the radio On.
- Press  as needed to display  and 1.
- Select Sensitivity Level of 1, 2, or 3 by using  or .

High Sensitivity 3, for quiet environments

Medium Sensitivity 2, for most environments and

Low Sensitivity 1 for noisy environments.





To turn VOX Off, simply turn the radio Off and then On again. The  will not be visible. Press  to turn off VOX and return to normal operation,  will flash. A short press  of will enable VOX again.



Note: There is a short delay between when you start talking and the radio transmits.


The use of wireless devices and their accessories may be prohibited or restricted in certain areas. Always obey the laws and regulations on the use of these products.


Setting Preferences for Scanning/Scan List

By using , you can monitor channels and codes for transmissions and lock in on the one that interests you. More importantly, you can find someone in your group who has accidentally changed channels and is talking during your scan. You don't have to set a new channel or code, the radio just resets itself temporarily to that channel and code and you can start talking.



- To start scanning, briefly press .

Your channel/code screen displays  and begins to scroll through channels. When the radio detects channel activity, it stops on that channel and displays its channel and code. You can talk to the person(s) transmitting without having to switch channels by pressing .

- To stop scanning, briefly press .



If you press  while the radio is scanning, the radio will transmit on the channel which was selected before you activated Scan.

If no transmission occurs within five seconds, scanning will resume.

If you want to scan channels without interference eliminator codes, change the code for your set channel to  before you briefly press .

Note: To Scan Repeater Channels (T7200 only), refer to page 29.

Nuisance Delete/ Manual Advance While Scanning

While scanning you can quickly delete a channel that the radio has loaded for an indefinite period of time by pressing  once, i.e. shortcut to Scan List Editing. You can also advance to the next channel with activity by manually pressing .



Setting the Battery *Type

Note: Battery type needs to be set when non Motorola batteries are used and this menu will not display if you use the Motorola NiMH battery. When a Motorola NiMH battery pack is used, your radio automatically detects and adjusts the battery meter.

- This feature allows the battery meter to recognize and properly display the power usage for single cell batteries.
- First, press until d displays. Either A (Alkaline) or n (NiMH rechargeable) is blinking.
- Press or until your choice of A or n displays.
- Then press M or to exit.

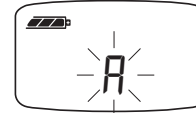


Table of Menu Functions

| Radio Model | Key(s) Pressed. | Menu Function |
|-------------|-----------------|--|
| All | | Hold down for three seconds and all buttons on the keypad will be locked except and . |
| | | Reset factory settings, by holding down for five seconds. |
| 7100 | or | Change the Channel. Please refer to page 16. |

Table of Menu Functions








| Radio Model | Key(s) Pressed. | Menu Function |
|-------------|--|--|
| 7100 |  1X | Change the Interference Eliminator Code. Please refer to page 10. |
| |  2X | Change the Call Tone (10 to choose from). Choose <input type="checkbox"/> if you want to turn Call Tone Off. Please refer to page 17 |
| |  3X | Microphone Gain selection. Please refer to page 18. |
| |  4X | Select <i>Y</i> /yes or <i>n</i> /no for each Channel you want to keep or delete from your scan list. Please refer to page 20. |
| |  5X | Choose Battery setting type <i>H</i> for alkaline <i>n</i> for rechargeable battery. Please refer to page 22. Note: This menu will not appear if the radio detects the NiMH battery (NTN8971). |
| 7200 |  or  | Change the Channel. Please refer to page 16. Can scroll through repeater channels after basic powerup sequence. Please refer to Setting Repeater Channels found on page 28. |





Table of Menu Functions

| Radio Model | Key(s) Pressed. | Menu Function |
|-------------|-----------------|--|
| 7200 | 1X | Choose the Frequency/repeater. Please refer to Setting Repeater Channels found on page 28. |
| | 2X | Choose Eavesdrop Reducer Code (0-3). Please refer to Setting Eavesdrop Reducer found on page 26. |
| | 3X | Change the Call Tone (0-10). Please refer to Setting the Call Tone and Call Display found on page 17. |
| | 4X | Sensitivity Level selection. Please refer to Setting Sensitivity Level found on page 18. |
| | 5X | Select <i>Y</i> /yes or <i>n</i> /no for each Channel of the Scan List. Please refer to Setting Preferences for Scanning/ Scan List found on page 20. |
| | 6X | Choose Battery setting type <i>H</i> for alkaline <i>n</i> for rechargeable battery. Please refer to page 22. Note: This menu will not appear if the radio detects the NiMH battery (NTN8971). |

Advanced Features (T7100 and T7200)



Selecting Bandwidth

Your T7100 and/or T7200 GMRS radios are set to 12.5 kHz out of the factory on certain channels:



| FRS/GMRS | GMRS Direct | GMRS Repeater | FRS . |
|----------|-------------|---|--|
| 1-7 | 15-22 | 5 r ^P - 22 r ^P | 8-14 |
| | | If repeater operation is enabled. (T7200 Only) | Permanently locked to 12.5 kHz on a 1/2 watt of power. You cannot change this setting. |

By being set to 12.5 kHz bandwidth, your radio can communicate clearly with the Motorola T6400 GMRS radio and any FRS radio in your group.

You must match your radio's bandwidth to that of the other radios in your group. To match your bandwidth to that of the GMRS radios that you want to talk to at 25 kHz, you must set your radios to 25 kHz:


- Turn your radio Off.
- Turn your radio back on while pressing  and .
- A triple power-up chirp will sound indicating that your radio is now set to 25 kHz bandwidth on all channels.
- Now you can talk to other GMRS radios in your group.

To return to 12.5 kHz bandwidth:

- Turn your radio Off.
- Turn your radio back on while pressing  and .
- A single power up chirp will sound indicating that your radio is now set to 12.5 kHz bandwidth on all channels.
- Now you can talk to other GMRS radios in your group.






Advanced Features (T7200 Only)

Setting Eavesdrop Reducer









 Your radio has the Eavesdrop Reducer feature, a scramble code that makes your transmissions sound garbled to anyone listening without the same code.

It doesn't guarantee secrecy, but it adds an extra layer of privacy.

Note: All the radios have to be set to the same scramble code for transmission to be clear.

- Turn radio On.
- To turn the Eavesdrop Reducer feature on, press  as needed until  is displayed.
- Then press  or  to choose the code.
- Select code 1-3. Factory Default is set at  which means that the feature is Off.



- When you exit by pressing , radio displays .
- To turn the Eavesdrop Reducer feature Off, press  as needed until  is displayed, then select  or  until  does not appear.
- Then press  to exit.

Understanding Repeater Channels

If you have a GMRS repeater and wish to use it, you must set your T7200 to repeater mode. Those channels are identified on the display by having both r^P in the Interference Eliminator Code area and **FREQ** at the bottom right of the display. They are identified as channels $15 r^P$ - $22 r^P$.




To enable repeater channels on your T7200:

- Turn your radio Off.
- Turn your radio back On while you press and hold the  and  for 3 seconds.

A very unique power-up chirp will sound indicating that your radio now has repeater capability. Now you can talk to other T7200 radios that are set to your same repeater Channel, Interference Eliminator Code, and Eavesdrop Reducer Code.

To disable repeater channels:


- Turn your Radio Off.
- Turn your radio back on while you press and hold the  and  for 3 seconds.

A single power-up chirp will sound indicating that your radio now has returned to normal channel mode.

Channels 15 r^P - 22 r^P will no longer appear on your display.







Setting Repeater Channels

Once you enable your Repeater Channels on your T7200:

- Press  to scroll up to channel 15 r^P - 22 r^P , located just after channel 22.

Setting Repeater Interference Eliminator Codes

The Interference Eliminator Codes for GMRS Repeater Channels 15 r^P - 22 r^P and GMRS Direct Channels 15-22 are linked. This means that when you change the code on a GMRS Repeater Channel, the code on the equivalent GMRS Direct Channel will change as well (i.e. If you are on channel 15, code 30 and you change to code 31, then the code will automatically change from 30 to 31 on channel 15 r^P). To change your Repeater Interference Eliminator Code:

- Press the  to scroll up to any channel between 15 r^P - 22 r^P .
- The Interference Eliminator Code assigned to the Repeater channel selected will show for 3 seconds until r^P replaces it.
- Press  once and the Interference Eliminator Code will flash.
- Press  or  until you select an Interference Eliminator Code.
- Press  again or press .

Scanning Repeater Channels

If you have Repeater channels and Scan enabled, the **FREQ** icon will display as Scan is scrolling through or landing on channels 15 rP - 22 rP.

Note: To enhance your radio's performance, remove the Repeater channels that you do not plan to use before initiating Scan. For example, it would be beneficial to remove channel 16 from your Scan List if you are using channel 16 rP and vice versa. Your radio will talk back on the correct transmit frequency if you follow this simple procedure. If you need additional help please refer to Setting Preferences for Scanning/Scan List found on page 20. You may also refer to Frequency and Code Charts found on page 36 for more details.



Weather



You can't change the weather, but you can be prepared for it when you take your Motorola Talkabout T7200 radio with you. That's because it tunes into broadcasts by the United States National Oceanic and Atmospheric Administration (NOAA) Weather Radio and Environment Canada Weatheradio.



You can listen to a weather channel or you can even set your radio to alert you to emergency weather broadcasts that interrupt routine broadcasts.

Both NOAA and Environment Canada have transmitters located throughout the United States and Canada, respectively. These transmitters broadcast watches, forecasts, and other information 24 hours a day.

Note: Service may not be available in all areas. Check with your local weather office for frequency and details, or visit www.nws.noaa.gov/nwr, (Canada: www.msc-smc.ec.gc.ca/cd/factsheets/wxradio). The use of the NOAA logo does not provide an endorsement or implied endorsement by NOAA's National Weather Service nor does the use of the Weatheradio logo provide an endorsement or implied endorsement by Environment Canada.



Whenever you listen to a weather channel, you cannot use your radio for two-way communications. However, a weather alert will notify you while the radio is in two-way mode (if you have enabled weather alert) and the radio is on but not transmitting or receiving.

Turning On Weather Channel Reception

To turn on weather channel reception, press and hold the  button. To turn off weather channel reception and return to two-way mode, press and hold the  button again.

Setting the Weather Channel

Your radio receives eight frequencies. See the Weather Frequency Chart on page 36 for a complete list.






- After turning on the weather broadcast, press  or  to select the strongest channel.



As with two-way radio reception, weather channel reception depends on how close you are to a transmitter and whether you are indoors or outdoors. Also, because weather channels are transmitted without codes, they may contain static or noise.

To set weather alerts:



Note: In some isolated areas, it may not be possible to receive weather channel transmissions.

- Switch to weather mode,
- press  once, and
- press  or  to select  (on).
- If you activate weather alert and return to two-way mode,  will display.



Note: The Talkabout T7200 Series two-way radios are designed to be two-way radios primarily, with the added utility of features such as Weather Alert. The radio uses the same circuitry for both two-way radio and weather alert receptions. Therefore, you can miss a weather alert while you are engaged in two-way communication (either transmitting or receiving). To ensure that you do not miss a weather alert, leave the radio in the Weather Mode.

Using Accessories

Make sure the radio is turned off before plugging audio accessories into the accessory port. Before you place an accessory on your head or in your ear, turn the volume down. After placing the accessory on your head or in your ear, adjust the volume by pressing  or .

Audio

Audio accessories will be the same as those currently available for all Talkabout Series radios, with all compatible audio accessories fully system tested with the T7100 and T7200 models prior to factory ship acceptance.

Remote Speaker Microphone

Lapel-mounted speaker/microphone providing hands-on, Push-To-Talk control for low profile radio operation without removing the radio from belt or carry case.

Ear piece with Push-To-Talk Microphone

Discreet, lightweight ear piece with hand-operated lapel or collar mounted microphone. It allows clear communication without disturbance or interference.

Headset with Swivel Boom Microphone

Comfortable, lightweight headset with T7100 and T7200.

Earbud

Discreet, lightweight ear piece which fits comfortably inside the ear to allow clear message reception without disturbing others or when noise would interfere.

Flexible Ear Receiver

Lightweight ear piece which fits comfortably and securely around the ear.

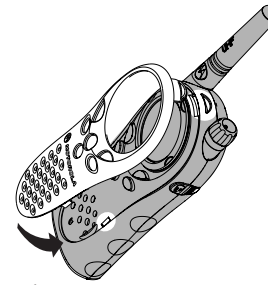
Ear piece with Boom Microphone

Discreet, lightweight ear piece which fits comfortably around the ear while boom microphone allows for remote radio placement and is VOX/Hands-free compatible.

Bezel/Face Plate

Attaching Face Plate/Bezel (Optional Accessory)

- To attach radio face plate, insert face plate tabs into slots aligning face plate with the appropriate buttons.
- Snap into place.

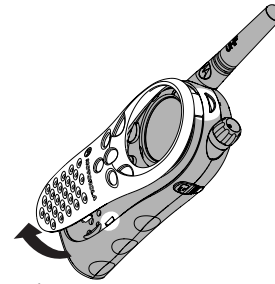


PRELIMINARY

Removing Radio Face Plate/Bezel

- To remove radio face plate, pull up gently on both SIDES of the bezel.
- Pick it up and off the keypad.
- Unhook the latch at the top.

Caution: DO NOT PULL BEZEL FROM THE TOP.



Use and Care



Use a soft damp cloth to clean the exterior.



Do not immerse in water.



Do not use alcohol or cleaning solutions.

If the radio gets wet...



Turn it off and remove batteries.



Dry with soft cloth.



Do not use until completely dry.

PRELIMINARY

Frequency and Code Charts

The charts on these pages provide frequency and code compatibility information. These charts are useful when using Motorola Talkabout Series two-way radios with other GMRS and FRS radios.

| T7100 Channel | Transmit Frequency (Mhz) | Transmit Power (Watts) | Description | T7200 Channel | Code Display | Receive Frequency (Mhz) |
|---------------|--------------------------|------------------------|---------------------------|---------------|--------------|-------------------------|
| 1 | 462.5625 | 2 | FRS 1/GMRS Interstitial 1 | 1 | 1-38 | 462.5625 |
| 2 | 462.5875 | 2 | FRS 2/GMRS Interstitial 2 | 2 | 1-38 | 462.5875 |
| 3 | 462.6125 | 2 | FRS 3/GMRS Interstitial 3 | 3 | 1-38 | 462.6125 |
| 4 | 462.6375 | 2 | FRS 4/GMRS Interstitial 4 | 4 | 1-38 | 462.6375 |
| 5 | 462.6625 | 2 | FRS 5/GMRS Interstitial 5 | 5 | 1-38 | 462.6625 |
| 6 | 462.6875 | 2 | FRS 6/GMRS Interstitial 6 | 6 | 1-38 | 462.6875 |
| 7 | 462.7125 | 2 | FRS 7/GMRS Interstitial 7 | 7 | 1-38 | 462.7125 |
| 8 | 467.5625 | .5 | FRS 8 | 8 | 1-38 | 467.5625 |
| 9 | 467.5875 | .5 | FRS 9 | 9 | 1-38 | 467.5875 |
| 10 | 467.6125 | .5 | FRS 10 | 10 | 1-38 | 467.6125 |
| 11 | 467.6375 | .5 | FRS 11 | 11 | 1-38 | 467.6375 |
| 12 | 467.6625 | .5 | FRS 12 | 12 | 1-38 | 467.6625 |
| 13 | 467.6875 | .5 | FRS 13 | 13 | 1-38 | 467.6875 |
| 14 | 468.7125 | .5 | FRS 14 | 14 | 1-38 | 468.7125 |
| 15 | 462.5500 | | GMRS Primary 1 | 15 | 1-38 | 462.5500 |
| 16 | 462.5750 | 2 | GMRS Primary 2 | 16 | 1-38 | 462.5750 |
| 17 | 462.6000 | 2 | GMRS Primary 3 | 17 | 1-38 | 462.6000 |
| 18 | 462.6250 | 2 | GMRS Primary 4 | 18 | 1-38 | 462.6250 |

| T7100 Channel | Transmit Frequency (Mhz) | Transmit Power (Watts) | Description | T7200 Channel | Code Display | Receive Frequency (Mhz) |
|---------------|--------------------------|------------------------|-----------------|---------------|--------------|-------------------------|
| 19 | 462.6500 | 2 | GMRS Primary 5 | 19 | 1-38 | 462.6500 |
| 20 | 462.6750 | 2 | GMRS Primary 6 | 20 | 1-38 | 462.6750 |
| 21 | 462.7000 | 2 | GMRS Primary 7 | 21 | 1-38 | 462.7000 |
| 22 | 462.7250 | 2 | GMRS Primary 8 | 22 | 1-38 | 462.7250 |
| | 467.5500 | 2 | GMRS Repeater 1 | 15 | RP, 1-38 | 462.5500 |
| | 467.5750 | 2 | GMRS Repeater 2 | 16 | RP, 1-38 | 462.5750 |
| | 467.6000 | 2 | GMRS Repeater 3 | 17 | RP, 1-38 | 462.6000 |
| | 467.6250 | 2 | GMRS Repeater 4 | 18 | RP, 1-38 | 462.6250 |
| | 467.6500 | 2 | GMRS Repeater 5 | 19 | RP, 1-38 | 462.6500 |
| | 467.6750 | 2 | GMRS Repeater 6 | 20 | RP, 1-38 | 462.6750 |
| | 467.7000 | 2 | GMRS Repeater 7 | 21 | RP, 1-38 | 462.7000 |
| | 467.7250 | 2 | GMRS Repeater 8 | 22 | RP, 1-38 | 462.7250 |

Weather Frequency Chart (T7200 Only)

| | | | |
|-----|---------|-----|---------|
| WX1 | 162.550 | WX5 | 162.450 |
| WX2 | 162.400 | WX6 | 162.500 |
| WX3 | 162.475 | WX7 | 162.525 |
| WX4 | 162.425 | WX8 | 163.275 |

PRELIMINARY


Frequency and Code Charts

PRELIMINARY

Carrier squelch (0) disables interference eliminator codes. This allows you to monitor all activity on the channel you are using. Interference eliminator codes help minimize interference by providing you with a choice of code combinations.

| Interference Eliminator Codes | | | | | |
|-------------------------------|---------|------|---------|------|---------|
| Code | Hz Freq | Code | Hz Freq | Code | Hz Freq |
| 1 | 67.0 | 14 | 107.2 | 27 | 167.9 |
| 2 | 71.9 | 15 | 110.9 | 28 | 173.8 |
| 3 | 74.4 | 16 | 114.8 | 29 | 179.9 |
| 4 | 77.0 | 17 | 118.8 | 30 | 186.2 |
| 5 | 79.7 | 18 | 123.0 | 31 | 192.8 |
| 6 | 82.5 | 19 | 127.3 | 32 | 203.5 |
| 7 | 85.4 | 20 | 131.8 | 33 | 210.7 |
| 8 | 88.5 | 21 | 136.5 | 34 | 218.1 |
| 9 | 91.5 | 22 | 141.3 | 35 | 225.7 |
| 10 | 94.8 | 23 | 146.2 | 36 | 233.6 |
| 11 | 97.4 | 24 | 151.4 | 37 | 241.8 |
| 12 | 100.0 | 25 | 156.7 | 38 | 250.3 |
| 13 | 103.5 | 26 | 162.2 | | |


Troubleshooting

| Symptom | Try This: |
|--|---|
| No Power | Reposition or replace alkaline batteries. Recharge or replace NiMH battery. |
| Message not transmitted | Make sure  is completely pressed as you transmit. Reposition, replace, or recharge batteries. |
| Hearing other noises or conversation on a channel | Confirm interference eliminator code is set. Shared channel or interference eliminator code may be in use, try another. |
| Message scrambled | (T7200) Eavesdrop Reducer code is on, or setting does not match other radios' settings; all radios must use the same Eavesdrop Reducer code. |
| Limited talk range | Steel and/or concrete structures, heavy foliage, use in buildings or vehicles decrease range. Check for clear line of sight to improve transmission. Wearing radio close to body such as in a pocket or on a belt decreases range. Change location of radio. |

Symptom

Try This:


Message not received

Confirm radios have the same channel and interference eliminator code settings.
Make sure  is **NOT** being pressed while trying to listen.
Reposition, replace, or recharge batteries.
Obstructions and operating indoors, or in vehicles, may interfere -- change location.

Heavy static or interference

Radios are too close, they must be at least five feet apart.
Radios are too far apart or obstacles interfering with transmission. Talk range is up to two miles depending on terrain and conditions.

Keypad locked

Make sure menu is unlocked. Unlock by pressing  for three seconds.

Low batteries

Recharge or replace NiMH battery. Replace AA batteries.
Extreme operating temperatures affect battery life.

PRELIMINARY

Symptom

Try This:

**Audio sounds muffled/
distorted or excessively soft/
loud.**

Check with the person you are talking to and make sure your bandwidth matches (12.5 KHz or 25 kHz).

Difficulty talking from T7100 or T7200 to FRS radio on channels 1-7.

Change to channels 8-14 or move closer together.

Low battery meter reading although new batteries are installed

Verify that the radio is set to the correct battery type.

Cannot activate VOX

Feature not set and on.

Motorola Limited Warranty

Motorola Personal Communications Products and Accessories Purchased in the United States and Canada

I. What This Warranty Covers

Defects in materials and workmanship in the following new **“Products”** manufactured, sold or certified by Motorola, with which this limited warranty is included in/on the package: (a) wireless cellular telephones, pagers and two-way radios that operate via “Personal Radio Service” (such as Family Radio Service and General Mobile Radio Service), together with software imbedded in any of these products, and (b) subject to the following exceptions, accessories or software sold for use with these products.

- **Battery Exception.** This limited warranty extends only to batteries in which the fully-charged capacity falls below 80% of rated capacity and batteries that leak;
- **Software Exceptions.** This limited warranty extends only to physical defects in the media (such as CD-ROM) that tangibly embodies each copy of any software sold and/or certified by Motorola for use with Products. Software that is not tangibly embodied in media and that is purchased separately from Products (such as software that is downloaded from the internet) comes **“as is” and without warranty.**

II. What the Period of Coverage Is

Subject to the following exceptions, one year from the date the Products are purchased by the first end-user:

- **90-Day Warranty Exception.** The warranty is for 90 days for: (a) any software tangibly embodied in media or (b) any accessories for two-way radios that are covered by this warranty, as described in Section I, above.
- **Limited Lifetime Warranty Exception.** The warranty is a limited lifetime warranty for the lifetime of ownership by the first end-user of the following products, **only**: (a) decorative covers, including bezel, PhoneWrap™ or case (any model); and (b) ear buds and boom headsets that transmit mono sound through a wire connection (this does **not** include ear buds or boom headsets that either transmit stereo sound or that are wireless, or both).
- **Repair / Replacement Exception.** The warranty is for the balance of the original warranty or for 90 days from the date returned and delivered to the first end-user, whichever is longer.

III. Who is Covered

This warranty extends to you only if you are the first end-user purchaser.

IV. What We Will Do to Correct Warranty Problems

At no charge to you, we have the option to repair or replace the Products that do not conform to the warranty, or to refund the Products' purchase price. We may use functionally equivalent reconditioned/refurbished/pre-owned or new Products or parts. No software updates are provided.

V. How to Get Warranty Service

PLEASE CALL US – DO NOT SHIP:

USA

Cellular 1-800-331-6456

Paging 1-800-548-9954

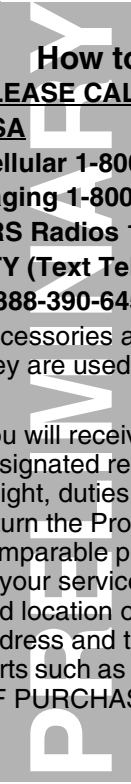
FRS Radios 1-800-353-2729

TTY (Text Telephone)

1-888-390-6456

Accessories and software -- call the number designated for the product with which they are used.

You will receive instructions on how to ship the Products to Motorola or our designated resource. If instructed to ship the Products, you must ship them with freight, duties and insurance prepaid. Regardless of where you are instructed to return the Products, you must include: (a) a copy of your receipt, bill of sale or other comparable proof of purchase; (b) a written description of the problem; (c) the name of your service provider (if this Product requires subscription service); (d) the name and location of the installation facility (if applicable) and, most importantly; (e) your address and telephone number. If requested, you must also return all detachable parts such as antennas, batteries and chargers. **RETAIN YOUR ORIGINAL PROOF OF PURCHASE.**



Canada

All Products 1-800-461-4575

TTY (Text Telephone)

1-888-390-6456

For Products we ask you ship to us, we will ship repaired or replacement Products at our expense for the freight and insurance, but at your expense for any duties. If additional information is needed, please contact us at the telephone number listed above.

VI. What This Warranty Does Not Cover

- **Products that are operated in combination with ancillary or peripheral equipment or software not furnished or otherwise certified by Motorola for use with the Products (“ancillary equipment”), or any damage to the Products or ancillary equipment as a result of such use. Among other things, “ancillary equipment” includes batteries, chargers, adaptors, and power supplies not manufactured or supplied by Motorola. Any of these voids the warranty.**
- Someone other than Motorola (or its authorized service centers) tests, adjusts, installs, maintains, alters, modifies or services the Products in any way. Any of these voids the warranty.
- Rechargeable batteries that: (a) are charged by other than the Motorola-approved battery charger specified for charging such batteries; (b) have any broken seals or show evidence of tampering; (c) are used in equipment other than the Product for which they are specified; or (d) are charged and stored at temperatures greater than 60 degrees centigrade. Any of these voids the warranty.

- Products that have: (a) serial numbers or date tags that have been removed, altered or obliterated; (b) board serial numbers that do not match each other, or board serial numbers that do not match the housing; or (c) nonconforming or non-Motorola housings or parts. Any of these voids the warranty.
- Defects or damage that result from: (a) use of the Products in a manner that is not normal or customary; (b) improper operation or misuse; (c) accident or neglect such as dropping the Products onto hard surfaces; (d) contact with water, rain, extreme humidity or heavy perspiration; (e) contact with sand, dirt or the like; or (f) contact with extreme heat, or spills of food or liquid.
- Physical damage to the surface of the Products, including scratches, cracks or other damage to a display screen, lens or other externally exposed parts.
- Failure of Products that is due primarily to any communication service or signal you may subscribe to or use with the Products.
- Coil cords that are stretched or that have any broken modular tabs.
- Leased Products.

Flat-rate repair rates may apply to Products not covered by this warranty. To obtain information about Products needing repairs that are not covered by this warranty, please call the telephone number previously listed. We will provide information on repair availability, rates, methods of payment, where to send the Products, etc.

VII. Some Other Limitations

This is Motorola's complete warranty for the Products, and states your exclusive remedies. This warranty is given in lieu of all other express warranties. Implied warranties, including without limitation, the implied warranties of merchantability and fitness for a particular purpose, are given only if specifically required by applicable law. Otherwise, they are specifically excluded.

No warranty is made as to coverage, availability, or grade of service provided by the Products, whether through a service provider or otherwise.

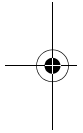
No warranty is made that the software will meet your requirements or will work in combination with any hardware or applications software products provided by third parties, that the operation of the software products will be uninterrupted or error free, or that all defects in the software products will be corrected.

In no event shall Motorola be liable, whether in contract or tort (including negligence) for damages in excess of the purchase price of the Product, or for any indirect, incidental, special or consequential damages of any kind, or loss of revenue or profits, loss of business, loss of information or data, or other financial loss arising out of or in connection with the ability or inability to use the Products, to the full extent these damages may be disclaimed by law.

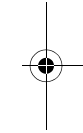


VIII. Patent and Software Provisions

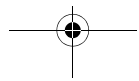
At Motorola's expense, we will defend you, and pay costs and damages that may be finally awarded against you, to the extent that a lawsuit is based on a claim that the Products directly infringe a United States patent. Our obligation is conditioned on: (a) you notifying us promptly in writing when you receive notice of the claim; (b) you giving us sole control of the defense of the suit and all negotiations for its settlement or compromise; and (c) should the Products become, or in Motorola's opinion be likely to become, the subject of a claim of infringement of a United States patent, you permit us, at our option and expense, either to: procure for you the right to continue using the Products; replace or modify them so that they become non-infringing; or grant you a credit for such Products, as depreciated, and accept their return. The depreciation will be an equal amount per year over the lifetime of the Products, as established by Motorola.



Motorola will have no liability to you with respect to any claim of patent infringement that is based upon the combination of the Products or parts furnished under this limited warranty with ancillary equipment, as defined in VI., above.



This is Motorola's entire liability with respect to infringement of patents by the Products.



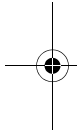


IX. State Law and Other Jurisdiction Rights

Some states and other jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or limitation on the length of an implied warranty, so the above limitations or exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from jurisdiction to jurisdiction.

To obtain information on Motorola Personal Communications Products, including warranty service, accessories and optional Extended Warranties on selected Products, please call:

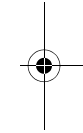


USA

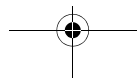
Cellular 1-800-331-6456
Paging 1-800-548-9954
FRS Radios 1-800-353-2729
TTY (Text Telephone)
1-888-390-6456

Canada

All Products 1-800-461-4575
TTY (Text Telephone)
1-888-390-6456



Accessories and software -- call the telephone number designated above for the product with which they are used.





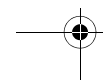
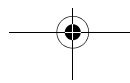
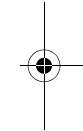
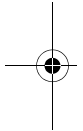
DO NOT SHIP PRODUCTS TO THESE ADDRESSES – INSTEAD PLEASE CALL.

To correspond with Motorola about the Products, please write us at
<http://www.motorola.com> or at:



In the USA:
Motorola, Inc.
600 North U.S. Highway 45
Libertyville, IL 60048

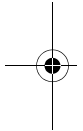
In Canada:
Motorola Canada Limited
5875 Whittle Road
Mississauga, ON L4Z 2H4





Software Copyright Notice

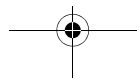
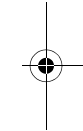
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Patent Notice

This product is covered by one or more of the following United States patents.

5896277 5894292 5864752 5699006 5742484 D408396 D399821 D387758
D389158 5894592 5893027 5789098 5734975 5861850 D395882 D383745
D389827 D389139 5929825 5926514 5953640 6071640 D413022 D416252
D416893 D433001

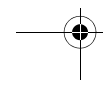
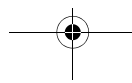
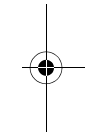
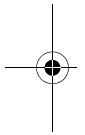
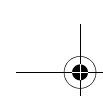


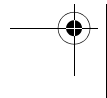
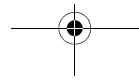
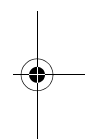
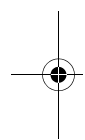
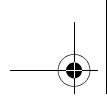
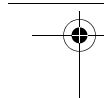
| Features | T7100 AA | T7200 AA/NiMH |
|--|-----------------------|-------------------------------------|
| Channel Frequencies* | 14 FRS 8 GMRS - | 14 FRS 8 GMRS 8 GMRS Repeater |
| Interference Eliminator Codes | 38 | 38 |
| NOAA weather receiver with Weather Alert | No | Yes |
| Scan | Yes | Yes |
| Scan List Editing | Yes | Yes |
| Nuisance Delete/Manual Advance | Yes | Yes |
| Eavesdrop Reducer | No | Yes |
| Call Tones | 10 | 10 |
| Keypad Lock | Yes | Yes |
| Talk Confirmation Tone | Yes | Yes |
| Button Beeps | Yes | Yes |
| Signal Strength Indicator | Yes | Yes |
| Channel Busy Indicator | Yes | Yes |
| IP-54 Weather Resistant | No | Yes |

| Features | T7100 AA | T7200 AA/NiMH |
|---|-----------------|----------------------|
| VOX with accessories 3 user selectable levels | Yes | Yes |
| VOX without accessories 3 user selectable levels | Yes | Yes |
| Backlit LCD Display | Yes | Yes |
| Battery Gauge | Yes | Yes |
| Low Battery Alert | Yes | Yes |
| Plug-in charging capable | Yes- Slow | Yes - Slow |
| Drop-in charging capable | Yes- Rapid | Yes - Rapid |
| Alkaline compatible | Yes- 4 AA | Yes - 4 AA |
| 12.5/25 kHz channel spacing* | Auto | Auto |



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- **Up to 5-mile range**
*Under ideal terrain and conditions.
- **22 Channels (8 GMRS + 14 FRS), each with 38 Interference Eliminator codes**
Motorola GMRS/FRS two-way radio to feature repeater channels. GMRS channels feature increased power for longer range; 14 FRS channels ensure backward compatibility with FRS two-way radios. 38 interference eliminator codes per channel help minimize interference from other groups.
- **Motorola Quality**
Shock/drop/temperature tested to meet Motorola's High standards.

Accessories for T7000 series - Convenient headphones, some with hands-free talk capabilities, mesh and waterproof carry cases, and rechargeable battery packs available from your retailer or www.motorola.com

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- **X-Pand™**
Voice compression technology for better sound at longer distances.
- **Helical Antenna**
Helps maximize talk range.
- **Talk Hands-Free (VOX/iVOX)**
Advanced voice activation lets you talk hands-free.
- **Talk Confirmation Tone**
Signals you're done talking.
- **Digital Audio Processing**
Provides crisper audio quality.

- **Signal Strength Indicator**
Visual indicator lets you know when other radios are heading out of range while you're communicating.
- **Batteries (not included)**
Requires only 4 AA alkaline batteries or 1 NiMH rechargeable battery.
- **Eavesdrop Reducer (T7200)**
Helps enhance privacy.
- **Repeater Channels (T7200)**
- **Weather Channels (T7200)**
- **1-Year Limited Warranty**
For details, call 1-800-353-2729

Specification Chart

| | |
|----------------------|----------------------------------|
| Transmit Power | 2 W GMRS; .5 W FRS (typical) |
| Receiver Sensitivity | 0.18µV |
| Audio Output | 500 mW |
| Receiver Technology | Digital Direct Conversion - DZIF |

Note: For T6220, weather radio service may not be available in all areas. Check with your local weather office for frequency and details or visit www.nws.noaa.gov/nwr in the US or www.msc-smc.ec.gc.ca/cd/factsheets/wxradio in Canada. The use of the NOAA logo does not provide an endorsement or implied endorsement by NOAA's National Weather Service nor does the use of the Weatheradio logo provide an endorsement or implied endorsement by Environment Canada.

Motorola® Talkabout® T7000



Proof of Purchase

**FCC GMRS
License required.**

**⚠ WARNING CHOKING HAZARD
SMALL PARTS**

Not for children under 3 years.
This product is not intended to be used
as a toy or plaything.